

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(12) UK Patent Application (19) GB (11) 2 117 611 A

(21) Application No 8306317

(22) Date of filing 8 Mar 1983

(30) Priority data

(31) 8206685

(32) 8 Mar 1982

(33) United Kingdom (GB)

(43) Application published
19 Oct 1983

(51) INT CL³

A01K 89/01

(52) Domestic classification

A1A 41

(56) Documents cited

GB 1313425

GB 0719042

(58) Field of search

A1A

(71) Applicant

George Thomas Riley

Shingleton,

148 Daubney Street,

Cleethorpes,

South Humberside

(72) Inventor

George Thomas Riley

Shingleton

(74) Agent and/or

Address for Service

A. A. Thornton and Co.,

Northumberland House,

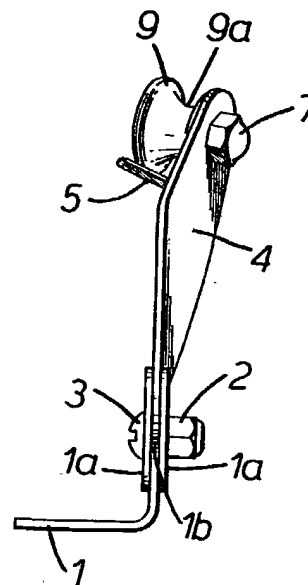
303-306 High Holborn,

London WC1V 7LE

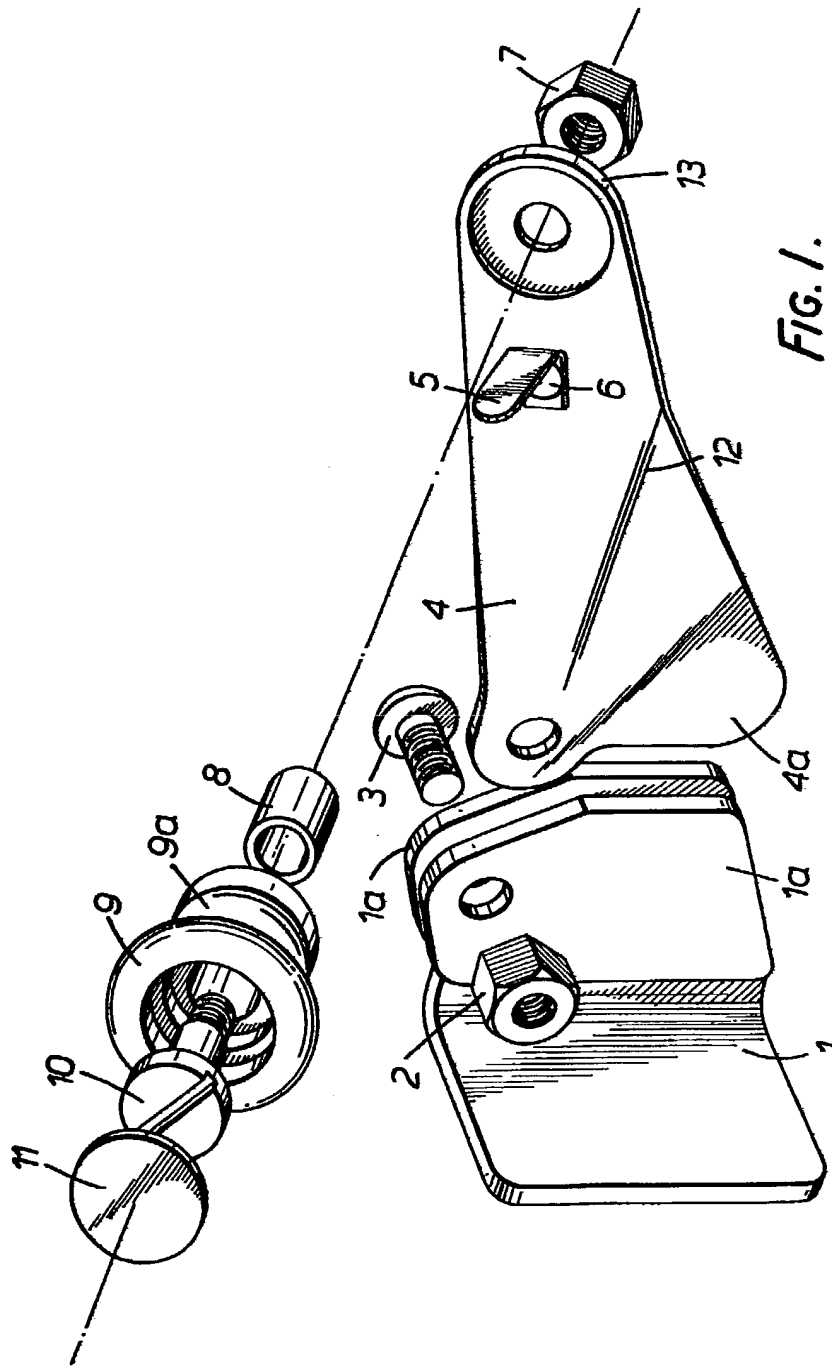
(54) A bail arm for a reel of a fishing rod

(57) A bail arm for a fishing reel comprises a pivotally mounted arm (4) showing at one end a transverse extension, suitably a pulley (9), the arm being manually movable between a first position wherein the extension is adjacent a line receiving portion of the reel and a second position in which the extension is remote from the line receiving portion of the reel. A member (5) is used to retain the line (not shown) around the pulley.

FIG. 3.



GB 2 117 611 A



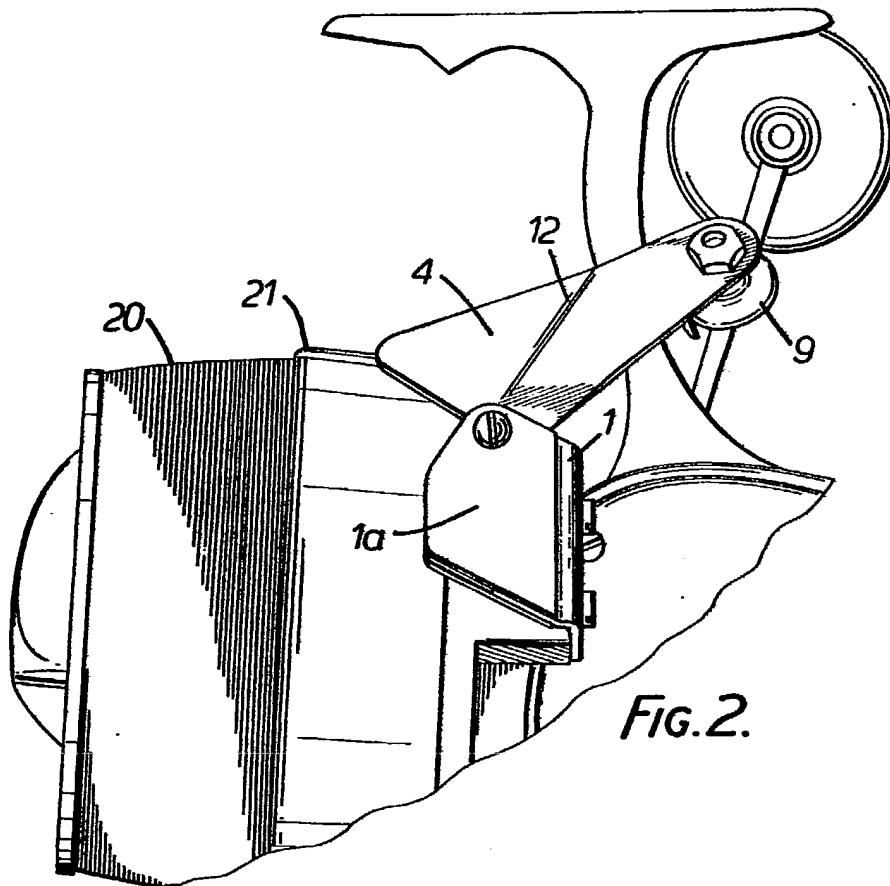


FIG. 2.

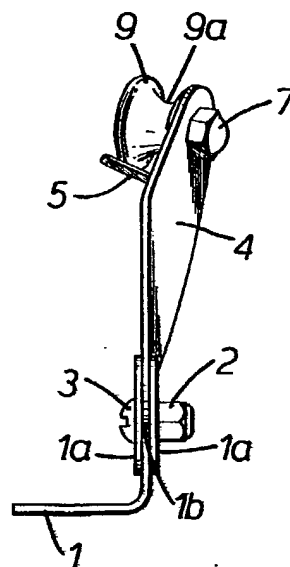


FIG. 3.

SPECIFICATION

Bail arm for a reel of a fishing rod

5 The present invention relates to a bail arm for use in combination with a reel of a fishing rod.

Bail arms are already known and are of basically two types, a manual type and an automatic type.

10 With the manual type the angler must thread the line on to a pulley of the bail arm when he wishes to reel in line. The difficulty with this manual type is that even when the line is removed from the bail arm e.g. during casting there is a risk that the line will become entangled with the bail arm which could, and often
15 does cause the fishing line to break. The loss of the line and any weights and hooks attached thereto is inconvenient and expensive.

The present invention has the advantage of being capable of being manually moved from a first position in which it is arranged to engage the line for reeling in the fishing line on to the reel to a second position clear from the path of the line e.g. during "casting".

25 One advantage of this is that the bail arm is moved out of the way of the fishing line when not required, thus preventing the possibility of the fishing line catching on the bail arm and possibly breaking.

A further advantage is that depending on the type of reel used, the bail arm in its second position can be used to lock the reel and prevent it rotating e.g. during casting.

The present invention will be more clearly understood from the following description of an embodiment thereof by way of an example only with
35 reference to the accompanying drawings, wherein:-

Figure 1 shows an exploded perspective view of a first embodiment of a bail arm of the present invention;

40 Figure 2 shows a portion of a fishing rod including the reel incorporating the bail arm of the present invention as shown in Figure 1; and

Figure 3 shows a side view of the bail arm shown in Figures 1 and 2.

45 The bail arm as shown in Figure 1 comprises a mount in the form of a flanged fixing bracket 1 extending in a first direction and two side plates 1a each fixed to and extending in a plane substantially normal to the flange of the bracket 1. The two side plates 1a provide a gap in which an arm 4 is
50 pivotably mounted and the bracket 1 is bent and extends into the gap to form an abutment surface 1b Figure 3. The pivot for the arm 4 comprises a screw 3 passing through coaxial apertures in the side plates 1a and the arm 4 and a co-operating nut 2 which
55 enables an adjustable degree of friction to be applied to the arm by urging the side plates 1a against the sides of the arm 4.

60 When assembled in the position shown in Figure 1, a depending portion 4a abuts the end of the portion of the bracket 1 between the plates 1a. This is the operative position of the arm, i.e. the position in which it receives the line for laying it on to a reel.

The distal end of the arm 4 forms a rounded corner 13 remote from the bracket and in the region of the rounded corner 13 there is provided a waisted pulley 9 protruding from one side of the arm 4. The pulley 9 is mounted for rotation on the arm 4 by means of being mounted on a sleeve 8 which is attached to the arm 4 by means of a screw 10 and a nut 7. A cover member 11 is also provided for closing the end of the screw 10 and the top of the pulley 9.

70 A single resilient member 5 is fixedly secured to the arm 4 by a flange 6 arranged adjacent the pulley 9. The member 5 is used to retain the line (not shown) around the pulley.

75 The region of the arm 4 having the pulley 9 is twisted slightly out of the plane of the portion received between the side plates 1a. The twisting is caused by bending the end region along a crease 12, which in this embodiment, when assembled in the closed position, extends at right angles from the plane of the flange of the mount 1 and through the pivot point. The degree of twist or bending depends on the length of the arm and the diameter of the reel,
80 this may for example be in the region of 9°.

85 Figure 2 shows the bail arm mounted on a reel housing 20 adjacent the reel 21 in its second or open position. From Figure 2 it can be seen that the side plates 1a extend in an upward direction relative to the axis of the reel, and that the pivot point of the arm 4 lies in the region of the edge of the side plates 1a nearest the circumference of the reel.

90 Prior to reeling in the fishing line, the arm 4 is manually pivotably moved to its first or operative position. The fishing line is threaded between the resilient member 5 and the pulley 9 and arranged for movement in a waisted portion 9a of the pulley 9 (Fig. 3). The bent portion of the arm 4 extends in a direction so that the pulley 9 is in the correct position
95 with respect to the reel and the line passed over the pulley such that the force imparted to the arm by the tensioned line maintains the arm in the first position. The resilient member 5 guides the fishing line adjacent the pulley when reeling in the line and prevents the line from inadvertently disengaging from the pulley. In addition the waisting of the pulley improves the laying of the line on the reel so that during casting the line comes off smoothly without bunching.

100 Prior to "casting" the line is removed from between the resilient member 5 and the pulley 9, the arm 4 is pivotably rotated to its open position clear from the path of the line taken during "casting" as shown in Figure 2. The amount of friction imparted to the arm 4 by the side plates 1a and screw 3 and nut 2 is such that the arm 4 cannot readily return to the first position even during casting. The portion 4a of the arm 4 protruding towards the reel in this position of the arm is advantageously rounded for preventing the line from catching on the corner and possibly breaking.

105 Figure 3 shows a side view of the bail arm shown in Figure 1 where the degree of twist and the construction of the surface of the pulley are more

apparent. The same reference numerals are used for the same parts and hence it is not thought that a detailed description is required.

- 5 The bail arm as shown in Figure 1 may be modified in as far as the mounting means may be integral with the reel housing either by moulding or by any other conventional technique.

- 10 The bail arm as shown in Figure 2 is attached to the reel housing and the reel housing may be fixed or rotatable. When used with either type, the bail arm in its second position can be arranged to come into engagement with a fixed position of the reel and thus prevent rotation of the reel housing.

- 15 The bail arm is intended for use in fishing rods in particular for sea fishing rods for which the reels are relatively large. It is therefore advantageous to use materials such as stainless steel for the bail arm and plated nuts and bolts and a chrome plated pulley which do not corrode under the reaction of the sea water.

20 From a manufacturing point of view, the bail arm is advantageously made from sheet metal.

- It will be appreciated by one skilled in the art, that further modifications can be made to the bail arm without going outside the scope of the invention. As an example, modifications may be made to the mount to include replacing one of the side plates 1a by a single protrusion provided on the reel housing and the second side plate 1a may comprise a suitably sized washer which urge against the arm 4 under the action of an adjustable screw.

CLAIMS

1. A bail arm for use on a fishing reel, comprising an arm pivotally mounted on a mounting member and provided at the distal end thereof with an extension extending transversely of the arm, the arm being manually movable between a first position wherein the extension is adjacent a line receiving portion of the reel and a second position in which the extension is remote from the line receiving portion of the reel.

2. A bail arm according to claim 1 wherein the extension is a pulley rotatably mounted about an axis extending transversely on the arm.

3. A bail arm according to claim 2, wherein the pulley surfaces is wristed.

4. A bail arm according to claim 1, 2 or 3 wherein the arm is made from a sheet of material and is bent about a crease line extending through the pivot of the arm so as to locate the extension at a location appropriate to the reel surface for laying line on the reel.

5. A bail arm according to any one of claims 1 to 4, wherein the mounting member comprises two spaced apart members arranged to receive therebetween the pivotally mounted end of the arm.

6. A bail arm according to any one of the preceding claims wherein the arm is generally triangular in shape with the pivotal mounting at one apex, the extension at another apex and the third apex forming an abutment arranged to engage the mounting member when the arm is the first position.

7. A bail arm according to claim 6 wherein the apex of the arm provided with the extension is on a part of the arm which is bent with respect to the

portion of the arm containing the other two apices by an angle of 90°.

8. A bail arm substantially as hereinbefore described with reference to the accompanying drawings.

9. A fishing reel when provided with a bail arm according to any one of the preceding claims.

10. A fishing reel, provided with a mounting member to which is pivotally mounted an arm the distal end of which is provided with an extension extending transversely of the arm, the arm being manually moveable between a first position wherein the extension is adjacent a line receiving portion of the reel and a second position in which the extension is remote from the line receiving portion of the reel.

Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd.,
Berwick-upon-Tweed, 1983.
Published at the Patent Office, 25 Southampton Buildings, London, WC2A 1AY,
from which copies may be obtained.